

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An information processing apparatus for determining analogousness between input words and registered words registered in a dictionary, the information processing apparatus comprising:

a sensor section configured to sense an object related to said input words, and generating a sensed output;

a pre-processing section configured to receive said sensed output, and extract feature parameters of said object related to said input words from said sensed output;

a plurality of discriminators configured to receive said feature parameters of said object, and process said feature parameters to generate notation functions using a plurality of discrimination functions;

a selector configured to select a plurality of discriminated words representing said object;

a word train generating section configured to receive said plurality of discriminated words along with said notation functions, said word train generating section operating to generate a set of word trains by using all permutations of said plurality of discriminated words; and

word analogousness calculating means configured to calculate word analogousness between each word train of said set of word trains and a registered word train using said notation functions,

wherein said feature parameters include parameters indicating color, shape, size, position, direction, and/or velocity of said object.

2. (Previously Presented) The information processing apparatus as set forth in claim 1, wherein said notation functions include

a concept notation function.

3. (Canceled)

4. (Previously Presented) The information processing apparatus as set forth in claim 1, wherein said plurality of discrimination functions is generated in a learning process.

5. (Previously Presented) The information processing apparatus as set forth in claim 4, wherein said learning process uses said feature parameters obtained by observing said object.

6. (Previously Presented) The information processing apparatus as set forth in claim 1, wherein said word analogousness calculating means also calculates word analogousness between a word in said each word train and a word in said registered word train using a concept notation function.

7. (Previously Presented) The information processing apparatus as set forth in claim 6, wherein the concept notation function includes a probability density function.

8. (Previously Presented) The information processing apparatus as set forth in claim 6, wherein the word analogousness calculating means calculates the word analogousness between

the word in said each word train and the word in said registered word train on the basis of Bhattacharyya distance or Kullback divergence between the concept notation functions of the word in said word train and the word in said registered word train.

9-18. (Canceled)

19. (Previously Presented) An information processing method for determining analogousness between input words and registered words registered in a dictionary, the information processing method comprising:

- sensing an object related to said input words, and generating a sensed output;
- receiving said sensed output and extracting feature parameters of said object related to said input words from said sensed output;
- processing said feature parameters to generate notation functions using a plurality of discrimination functions;
- selecting a plurality of discriminated words representing said object;
- generating a set of word trains by using all permutations of said plurality of discriminated words; and
- calculating word analogousness between each word train of said set of word trains and a registered word train using said notation functions.

20. (Previously Presented) A recording medium on which a program for determining analogousness between input words and registered words registered in a dictionary is recorded, the program comprising the executable instructions to:

sense an object related to said input words, and generating a sensed output;
receive said sensed output and extract feature parameters of said object related to said input words from said sensed output;
process said feature parameters to generate notation functions using a plurality of discrimination functions;
select a plurality of discriminated words representing said object;
generate a set of word trains by using all permutations of said plurality of discriminated words; and
calculate word analogousness between each word train of said set of word trains and a registered word train using said notation functions.

21-22. (Canceled)